# The Web Kit Open Source Project

## Session 120

These are confidential sessions—please refrain from filming or taking pictures.

Application Technologies

# The Web Kit Open Source Project

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Safari and Web Kit Engineering Manager

http://developer.apple.com/wwdc2005/

# Introduction

- We’re taking a new approach to Web Kit Open Source
- We’d like to tell you some details and answer your questions

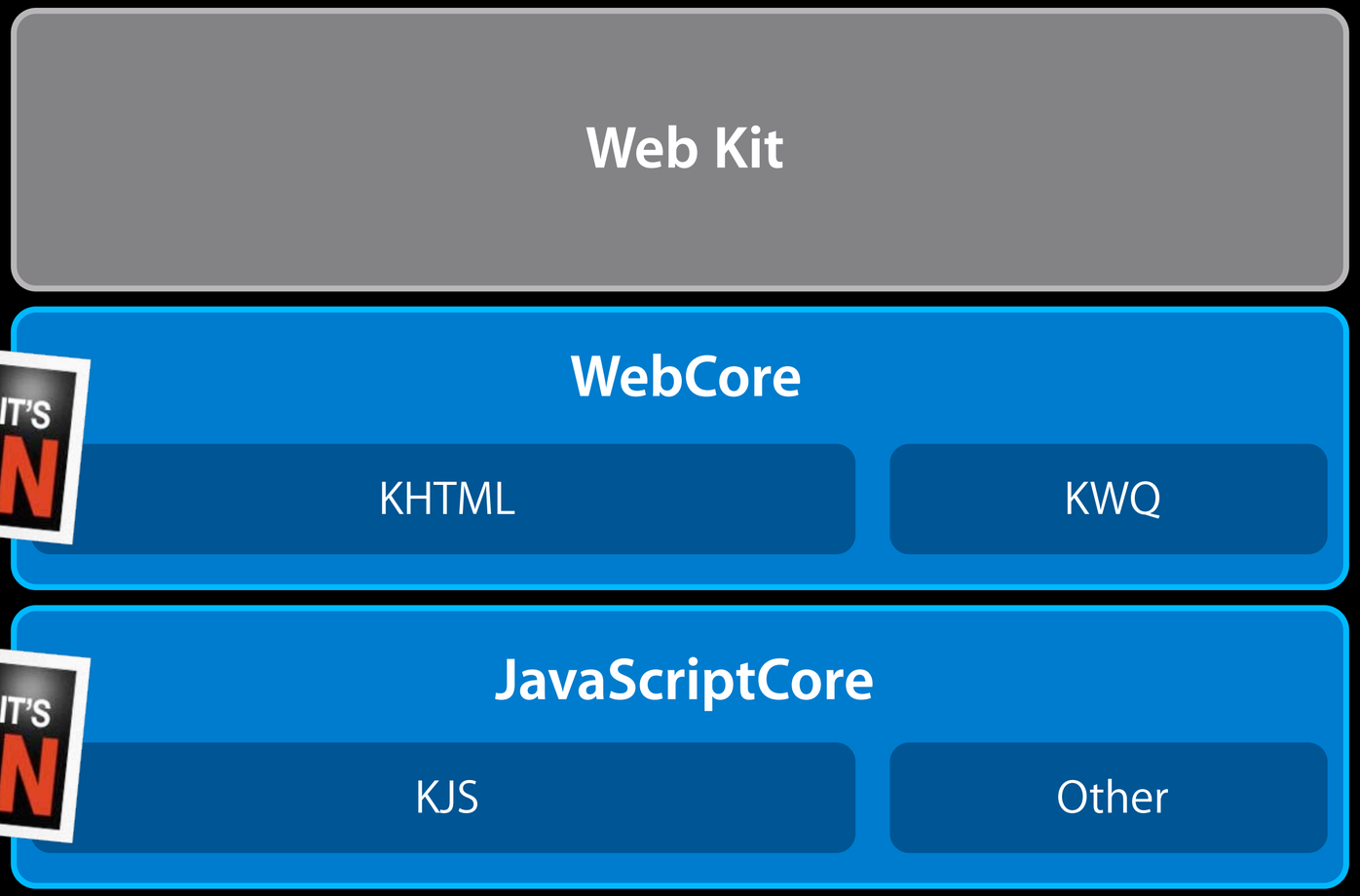
# History of the Web Kit

| | |
|---|---|
| **2001** | Safari project begins<br>KHTML chosen |
| **January 2003** | Safari 1.0 beta<br>Public announcement, WebCore, JavaScriptCore |
| **June 2003** | Safari 1.0<br>First release of the Web Kit framework |
| **October 2003** | Safari 1.1<br>Safari and the Web Kit built in for Mac OS X 10.3 |
| **February 2004** | Safari 1.2<br>XMLHttpRequest |
| **June 2004** | WWDC preview of Safari 1.3 and Safari 2.0<br>Canvas element, editing, dashboard |
| **April 2005** | Safari 1.3 and Safari 2.0<br>Safari 2.0 included with Mac OS X 10.4 |
| **June 2005** | Web Kit Open Source Project<br>Public repository and more |

# How We Did It Before

- WebCore and JavaScriptCore sources published
  http://developer.apple.com/darwin/projects/webcore/
- Mailing list for discussion and contributions
- But… it wasn't easy to build or test yourself

# More Code Is Open



# More Code Is Open

**Web Kit**

**WebCore**

KHTML

KWQ

**JavaScriptCore**

KJS

Other

**Web Kit System Interface**

# More Open Means…

## For Apple

- Better testing
  - More people can test as Web Kit development proceeds
  - Regressions are caught early
  - Engine gets tested before we release it in Safari
- More eyes on the code
  - Anyone can study Web Kit code for correctness and security
- Richer participation
  - Individuals and groups welcome to contribute

# More Open Means…

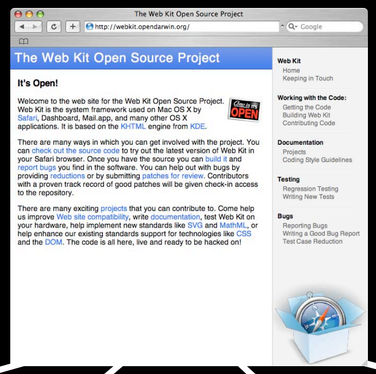
## For you

- Access to the code
  - See engine changes—as they are checked in
  - Try out builds—long before the general public
- Access to the developers
  - Your bug fixes—reviewed by experts
  - Talk to them—influence what they work on
- An invitation to participate
  - Fix the things that bother you
  - Be a part of the community that determines Web Kit’s future

# With More Access

## Developer Website

webkit.opendarwin.org



**Public**
**CVS Repository**

anoncvs.opensource.apple.com

**Developer**
**Mailing List**

webkit@opendarwin.org

**IRC Channel**
**For Developers**

#webkit at freenode.net

**Public Bug**
**Database**

bugzilla.opendarwin.org

# Other Changes

- Building Web Kit, WebCore, and JavaScriptCore is easy
- Changes visible as we check in
  - Includes complete history since the beginning
- Contributions encouraged
  - Website has policy for integrating changes
  - Web Kit developers will be there on mailing list and IRC

# Some Web Kit Developers Here Today

**Dave Hyatt**
Safari and Web Kit engineer, author of ***Surfin' Safari***
Expert on WebCore, especially the layout engine

**Maciej Stachowiak**
Safari and Web Kit engineer
Knows it all, especially expert in JavaScript and DOM

# Demo

## Downloading and Building Web Kit

**Maciej and Dave**

http://developer.apple.com/wwdc2005/

# Ways To Contribute

- Test
- Code
- Pitch in

# Test

- Get the latest
  - Download source
  - Build it
  - Try it out
- Report bugs
- Create tests

# Code

- Fix bugs
- Port to other platforms
- Add features

# Pitch In

- Answer questions on the mailing list and IRC
- Reduce bugs to minimal test cases
- Discover already-fixed bugs
- Discover duplicate bugs
- Improve the website
- Improve the documentation

# Your Options When a Bug "Bugs You"

- Discuss with a community of Web Kit experts
- Fix it yourself and contribute a patch
- Put it in the Web Kit Bugzilla bug database
  http://bugzilla.opendarwin.org/
- Put it in the Apple internal bug database
  http://bugreport.apple.com/

# Demo

## Fixing a bug

**Dave and Maciej**

http://developer.apple.com/wwdc2005/

# Beyond Mac OS X

- Convergence with KDE
  - CVS access—easier to move changes to KDE
  - Volunteers—help move changes from KDE
- Opportunity to integrate existing projects
  - GTK+ port
  - OmniGroup improvements
- Potential for new projects
  - Windows port for site testing
  - Improve KWQ as a porting layer

# Your Invitation

# More Information

http://developer.apple.com/wwdc2005/

# The Web Kit Open Source Project Website

http://webkit.opendarwin.org/

# Documentation, Sample Code, and Other Resources

http://developer.apple.com/wwdc2005/

# Related Sessions

| | |
|---|---|
| Introduction to Web Kit Development | Session 128<br>Thursday 9:00AM |
| Advanced Web Kit Development | Session 129<br>Thursday 10:30AM |
| Safari for Web Designers | Session 135<br>Thursday 2:00PM |
| Advanced Dashboard Widgets | Session 134<br>Thursday 2:00PM |

# Who to Contact

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# Q&A

**Mark Malone**
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http://developer.apple.com/wwdc2005/

# WWDC2005

Worldwide Developers Conference